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SOUTHWEST GAS CORPORATION RECEIVED

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AZ CORP COMMISSION
DOCKET CONTROL

April 5, 2012

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007-2996

Subject: Southwest Gas Corporation's Gas Heat Pump Technology
Reimbursement Plan, G-01551A-10-0458, D.72723

In compliance with Decision No. 72723, Southwest Gas Corporation hereby files an original and thirteen (13) copies of its Gas Heat Pump Technology Development Reimbursement Plan.

If you have any questions, please contact me at (702) 876-7163.

Respectfully,

Debra S. Gallo mg cmg

Debra S. Gallo, Director
Government & State Regulatory Affairs

DSG:kt
Enclosure

Arizona Corporation Commission

DOCKETED

APR - 6 2012

DOCKETED BY	<i>mg</i>
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SOUTHWEST GAS CORPORATION

**Gas Heat Pump Technology Development
Reimbursement Plan**

April 5, 2012

SOUTHWEST GAS CORPORATION
GAS HEAT PUMP TECHNOLOGY DEVELOPMENT REIMBURSEMENT PLAN

SUMMARY

Pursuant to the settlement agreement that was approved by the Arizona Corporation Commission (ACC or Commission) in Decision No. 72723, Southwest Gas committed to:

- Prepare an accounting for all gas heat pump (GHP) technology development costs that have been funded by Arizona ratepayers through base rates and the research and development (R&D) surcharge;
- Track the Arizona funding for GHP technology development costs as a potential regulatory liability, to be returned to ratepayers, only to the extent commercial development occurs and revenues and royalties are received by Southwest Gas and profits and royalties are received by any other entities that are affiliated with Southwest Gas including but not limited to IntelliChoice Energy LLC (ICE); and
- Prepare a plan to reimburse Arizona customers for their proportionate level of funding of GHP technology development costs. This plan will include a methodology for how the benefits of any commercialization revenues and royalties associated with the gas engine driven air conditioning units (referred to in this document as GEDAC) are to be shared with Southwest Gas' Arizona ratepayers to ensure that customers receive credit for any investment that contributed to the development of this technology.

Southwest Gas' compliance with the Commission's decision is described below. The attached worksheet provides supporting calculations for the amounts described in this filing and includes the proposed model to be used for calculating any reimbursement to Arizona customers.

ACCOUNTING FOR GHP TECHNOLOGY DEVELOPMENT COSTS

An accounting of the GHP technology development costs is provided on the attached worksheet. Southwest Gas began incurring development costs in 2002. However, costs associated with GHP technology development have only been included in Southwest Gas' Arizona rates since January 1, 2005, when Southwest Gas' Energy Efficient Technology Department (EETD) was created. During the relevant time period, EETD's development of GHP technology consisted of work on two projects: (1) a 10-ton rooftop GEDAC unit; and (2) to a lesser extent an AISIN manufactured gas-powered air conditioning unit. AISIN SEIKI Co., Ltd., a Japanese company, produces and manufactures both an 8-ton and a 15-ton commercial GHP product for heating and cooling applications.

The attached worksheet identifies all GHP technology development costs and calculates the amounts that have been included in Arizona rates. Based upon these calculations, 27 percent of the total costs that were incurred by Southwest Gas through 2011 are attributable to Arizona and are subject to this reimbursement plan. This percentage may change in future years to the extent Southwest Gas incurs additional costs for GHP technology development, but, consistent with the Commission's Decision, no additional costs will be funded by Arizona customers beyond December 31, 2011.

TRACK ARIZONA FUNDING OF GHP AS POTENTIAL REGULATORY LIABILITY

As reflected on the attached worksheet, \$4,402,593 of the total GHP technology development costs are subject to this reimbursement plan and will be tracked as a potential regulatory liability. This is also the amount that was identified and that will be eligible to be reimbursed to Arizona customers if the conditions of reimbursement set forth in the settlement agreement are satisfied.

PLAN TO REIMBURSE ARIZONA RATEPAYERS FOR THEIR PROPORTIONATE LEVEL OF GHP COSTS

To the extent the conditions of reimbursement set forth in the settlement agreement are satisfied, Southwest Gas proposes to credit Arizona customers \$250 for each 10-ton rooftop GEDAC unit and \$200 for each AISIN GHP unit that is sold by Southwest Gas or any of its affiliates. The credits to Arizona customers will be tracked as a regulatory liability and the balance of the regulatory liability at the end of the test year in Southwest Gas' next general rate case will be amortized (i.e. returned to Arizona customers) over an amortization period that is approximately equal to one rate case cycle. Southwest Gas proposes to account for the regulatory liability through December 31, 2021 or until Southwest Gas no longer has a financial interest in an affiliate that sells either the GEDAC or AISIN GHP units, whichever occurs first.

SOUTHWEST GAS CORPORATION
ENERGY EFFICIENT TECHNOLOGY DEPARTMENT
ACCOUNTING FOR GAS HEAT PUMP (GHP) TECHNOLOGY DEVELOPMENT COSTS
PLAN TO REIMBURSE ARIZONA CUSTOMERS - 2011

Line No.	Year	GHP %	Total Expenditures	Shareholder Funded	Expenditures Recovered in Rates			2011 Arizona Percentage	GHP		Line No.
					Nevada	California	Arizona		Revenue/Royalties Received by SWG [g]	Profits/Royalties Rec'd by Affiliates	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
EETD Costs Allocated to GHP Development [1], [2]											
1	2002	100%	\$ 214,425	\$ 214,425	\$ 0	\$ 0	\$ 0	\$		no	1
2	2003	100%	694,020	694,020	0	0	0		0	no	2
3	2004	100%	2,826,855	2,826,855	0	0	0		0	no	3
4	2005	100%	2,304,710	1,975,235	108,134	33,178	188,163		0	no	4
5	2006	85%	2,145,868	1,554,356	91,914	28,201	471,398		0	no	5
6	2007	85%	1,797,633	1,143,828	91,914	28,201	533,689		0	no	6
7	2008	85%	1,654,270	955,152	91,914	28,201	579,003		0	no	7
8	2009	65%	1,346,012	376,213	0	145,862	823,936		0	no	8
9	2010	65%	1,353,881	379,927	0	150,017	823,936		0	no	9
10	2011	65%	1,562,668	584,443	0	154,289	823,936		0	no	10
11	Total		\$ 15,900,342	\$ 10,704,454	\$ 383,874	\$ 567,951	\$ 4,244,062				11
12	AZ R&D Schg [3]		158,531				158,531				12
13	Grand Total		\$ 16,058,873				\$ 4,402,593 [4]	27%	\$	0	13

[1] Total EETD [5]											
14	2002		\$ 214,425	\$ 214,425	\$ 0	\$ 0	\$ 0				14
15	2003		694,020	694,020	0	0	0				15
16	2004		2,826,855	2,826,855	0	0	0				16
17	2005		2,304,710	1,975,235	108,134	33,178	188,163				17
18	2006		2,524,551	1,828,654	108,134	33,178	554,585				18
19	2007		2,114,862	1,345,680	108,134	33,178	627,870				19
20	2008		1,946,200	1,123,708	108,134	33,178	681,180				20
21	2009		2,070,788	578,790	0	224,404	1,267,594				21
22	2010		2,082,894	584,504	0	230,796	1,267,594				22
23	2011		2,404,105	899,143	0	237,368	1,267,594				23
24	Total		\$ 19,183,409	\$ 12,071,014	\$ 432,534	\$ 825,280	\$ 5,854,582				24

[2] Total EETD costs multiplied by the GHP percentage in column (b).
[3] Estimated amount included in the Arizona R&D surcharge for the GEDAC Demonstration Project. Final amount will be available in April 2012 when the 2011 Summary Report is filed with the Commission.
[4] \$4,402,593 is the maximum potential regulatory liability to be offset with GHP royalties.
[5] Does not include Arizona R&D surcharge or Nevada UTD dollars.
[6] Currently, the royalties to be accounted for by Southwest Gas are \$250 for each GEDAC unit sold and \$200 for each AISIN GHP unit sold.